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EXAMINER	
KELLEY, STEVEN SHAUN	

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket@dcpatent.com

Office Action Summary	Application No.	Applicant(s)	
	10/580,677	VERMOLA ET AL.	
	Examiner	Art Unit	
	STEVEN KELLEY	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 October 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18-21,24,25,27-36,38,39 and 42-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-21,24,25,27-36,38,39 and 42-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 18, 20, 24, 25, 27, 29-33, 35, 38, 39, 42 and 44-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 7,065,333 to Engstrom (hereinafter "Engstrom") in view of U.S. Patent 6,122,263 to Dahlin et al. (hereinafter "Dahlin") and U.S. Patent 7,062,303 to Guterman (hereinafter "Guterman").

Regarding claim 18, Engstrom teaches a method of receiving data comprising: receiving data from a broadcast network; processing the received data; outputting the processed data (see the Summary of Invention section and the description of Fig. 4 in column 8, which teaches the structures for receiving (tuners 452 and 453), processing (audio interface 454) and outputting broadcast data (speaker (not shown) as described in column 8, lines 26-27); in response to an interruption, proceeding in a first resource saving mode by continuing to receive data from the broadcast network but not processing and not outputting said received data (see steps 802-806 in Fig. 8, which teach that when the mobile terminal receives an incoming call while receiving a broadcast, the broadcast may be interrupted and the broadcast data may be stored for later playback. As the broadcast is "interrupted", the stored broadcast audio and/or video data is not processed and is not output, as recited).

Regarding the recited feature of "proceeding in a second resource saving mode in which no data is received from the broadcast network, after operating in said first resource saving mode for a first predetermined time period", Dahlin teaches a mobile radio terminal 106, which includes (and switches between) cellular control and transceiver circuitry 109 and Digital Audio Broadcast (DAB) receiver circuitry subsection 107. Column 6, lines 12-37 of Dahlin describe the process by which the DAB receiver subsection 107 is turned off, which teaches that in one embodiment "alternatively, the radio terminal control section 109 can employ time-out circuitry (not explicitly shown) that switches off the receiver section (107) under certain conditions after a predetermined amount of time." The "timeout' period described in Dahlin is the recited "first predetermined time period" and turning off the receiver in Dahlin would also meet the limitation of "proceeding in a second resource saving mode in which no data is received from the broadcast network".

Therefore, as Dahlin teaches the conventionality of turning off a receiver after a predetermined amount of time (which can be based on certain conditions), it would have been obvious to one of ordinary skill in the art to modify Engstrom with the ability to "timeout a receiver" (based on a condition such as an interruption), in order to save mobile device resources and "proceed in a second resource saving mode in which no data is received from the broadcast network", as is conventional.

Regarding the feature of "wherein after operating in said second resource saving mode for a second predetermined time period, an application for outputting the processed data is deactivated", Guterman is added to address this feature.

In an analogous art, Guterman teaches methods for performing power conservation in a mobile device by progressively powering down. Guterman teaches in column 2 that wireless device 10 includes a baseband processor 12, a general purpose processor 24. Column 2, lines 19-29 teach that "both the baseband processor 12 and the general purpose processor 24 may have software for implementing a power saving feature. To do so, each processor 12 or 24 *progressively transitions to one or more lower power consumption states*. A variety of triggers may be detected to control the transition between power consumption states. In one embodiment, these triggers are based on inactivity or activity. Namely, inactivity causes a processor 12 or 24 to transition to a lower power consumption state and activity causes a processor 12 or 24 to power back to a higher power consumption state." Additionally, column 1, lines 29-36, of Guterman teach "Generally, processor-based systems progressively power down. Some processor-based systems have several power consumption states. Based on a triggering of event such as lack activity, the system may power down to a lower power consumption state. *After a period of continued inactivity, a system may power down to an even lower power consumption state*." Columns 2-3 of Guterman also teaches that the communications subsystems and software application subsystems are interrelated (and may be included in the same or different integrated circuits) and are powered down "to coordinate power saving".

Therefore, as Guterman teaches "progressively powering down" software applications (which teaches and/or suggests progressively longer timeout periods (recited "second predetermined time period")), and as Dahlin also teaches using a

timeout period to power down, it would have been obvious to one of ordinary skill in the art to "deactivate the applications" of Engstrom/Guterman "after a second predetermined period of time", in view of Dahlin/Guterman's teachings of progressively powering down to lower power consumption states, as is conventional.

Regarding the newly recited feature in claim 18 (which was previously recited in claim 23), which recites "wherein the step of receiving data from the broadcast network comprises filtering the received data in order to discard unwanted data", see for example, column 7 and see Fig. 6 as described in column 9 of Engstrom, which teaches that the tuners 452 and 453 "scan for user preference broadcasts" where the user preferences "comprise filtering the received data" as a user preference broadcast interrupts another broadcast, in order to discard unwanted (non-user preference broadcasts) data, as recited.

Regarding claim 20, which recites "wherein, when in said first resource saving mode, received data is stored", see step 806 in Fig. 8.

Regarding claim 24, which recites "wherein, after operating in said second resource saving mode for a third predetermined time period, removing a filter arranged to perform said filtering step", although Engstrom teaches using filters (as described above in the rejection of claim 23, see column 7, lines 50-67, which include "radio tuner programs"), Engstrom does not explicitly teach this feature. As described above in the rejection of claim 18, Engstrom (as modified by Dahlin and Guterman) teaches progressively timing out communications and software applications (using increasing

timeout periods) within a wireless device to proceed in a plurality of progressively lower powered modes. Therefore, it would have been obvious to one of ordinary skill in the art to power down (recited "remove") the filters of Engstrom after a "third predetermined time period" (which could be equal to or longer than the "second predetermined time"), in view of Dahlin/Guterman's teachings of progressively increasing timeout periods used to power down software applications, as is conventional.

Regarding claim 25, which recites "wherein, after operating in said second resource saving mode for a fourth predetermined time period, an IP session arranged to handle the output data is closed", Engstrom teaches using IP protocols (see columns 3 and 5-6) for broadcast sessions and Dahlin also teaches using IP networks and protocols. It is noted that although Engstrom and Dahlin do not explicitly use the word "session", the applications and programs used for reception of broadcast data transmitted via IP protocols (in both Engstrom and Dahlin) will establish and maintain an IP session. As described above in the rejection of claim 24, Engstrom (as modified by Dahlin and Guterman) teaches progressively timing out (using increasing timeout periods) communications and software applications within a wireless device to proceed in a plurality of progressively lower powered modes. Therefore, it would have been obvious to one of ordinary skill in the art to power down or close an IP session established in Engstrom/Dahlin after a "fourth predetermined time period" (which could be equal to or longer than the "second predetermined time"), in view of Dahlin/Guterman's teachings of progressively increasing timeout periods used to power down software applications, as is conventional.

Regarding claim 27, which recites "wherein the interruption is an activation of an application unrelated to reception of data from the broadcast network", see step 802 in Fig. 8, where the incoming phone call is an "unrelated application", as recited.

Regarding claim 29, which recites "comprising displaying a list of services provided over the broadcast network", see the description of Fig. 5 in column 8, which teaches that "Application 524 may store broadcast information, such as schedules, locally in data store 522", where the schedule (recited list of services) may be displayed on display 456, and see also column 9, lines 35-54, which teach notification of user preference broadcast information.

Regarding claim 30, which recites "comprising updating said list of services and displaying an updated list", it is conventional and inherent that broadcast "schedules" are updated, as recited.

Regarding claim 31, which recites "wherein the step of outputting comprises at least one of: displaying visually displayable data; and outputting audio data", see the description of Fig. 4 in column 8, which includes audio interface 454, speaker and display 456 for performing the recited outputting.

Regarding claim 32, which recites "a computer program comprising instructions that, when run on processing means within a data receiving device, causes said data receiving device to perform a method according to claim 19", see Fig. 4 which includes a CPU 412 and memories 420, 430 and 434 for storing instructions, as recited.

Regarding claim 33, Engstrom teaches a data receiving device (mobile terminal 400) comprising: a receiver arranged to receive data from a broadcast network (tuner (1) and tuner (2), 452 and 453 in Fig. 4, as described in column 8); at least one processor arranged to process the received data and to cause output of the processed data (processor 412 in Fig. 4, as described in columns 7-8, which is "arranged to process and cause output of the processed data", as described in the methods of Figs. 6-9); in response to an interruption the data receiving device being arranged to operate in a first resource saving mode in which the receiver remains active but received data is not processed by the processor and not output (see for example, steps 802-806 in Fig. 8, which teach that when the mobile terminal receives an incoming call while receiving a broadcast, the broadcast may be interrupted and the broadcast data is stored for later playback. As the broadcast is "interrupted", the stored broadcast audio and/or video data is not processed and is not output, as recited).

Regarding the recited feature of "the data receiving device being arranged to operate in a second resource saving mode in which the receiver is deactivated, after operating in said first resource saving mode for a first predetermined time period", Dahlin teaches a mobile radio terminal 106, which includes (and switches between) cellular control and transceiver circuitry 109 and Digital Audio Broadcast (DAB) receiver circuitry subsection 107. Column 6, lines 12-37 of Dahlin describe the process by which the DAB receiver subsection 107 is turned off, which teaches that in one embodiment "alternatively, the radio terminal control section 109 can employ time-out circuitry (not explicitly shown) that switches off the receiver section (107) under certain conditions

after a predetermined amount of time." The "timeout' period described in Dahlin is the recited "first predetermined time period" and turning off the receiver in Dahlin would also meet the limitation of "proceeding in a second resource saving mode in which the receiver is deactivated".

Therefore, as Dahlin teaches the conventionality of turning off a receiver after a predetermined amount of time (which can be based on certain conditions), it would have been obvious to one of ordinary skill in the art to modify Engstrom with the ability to "timeout a receiver" (based on a condition such as an interruption), in order to save mobile device resources, as is conventional.

Regarding the feature of "wherein after operating in said second resource saving mode for a second predetermined time period, an application for outputting the processed data is deactivated", Guterman is added to address this feature.

In an analogous art, Guterman teaches methods for performing power conservation in a mobile device. Guterman teaches in column 2 that wireless device 10 includes a baseband processor 12, a general purpose processor 24. Column 2, lines 19-29 teach that "both the baseband processor 12 and the general purpose processor 24 may have software for implementing a power saving feature. To do so, each processor 12 or 24 progressively transitions to one or more lower power consumption states. A variety of triggers may be detected to control the transition between power consumption states. In one embodiment, these triggers are based on inactivity or activity. Namely, inactivity causes a processor 12 or 24 to transition to a lower power consumption state and activity causes a processor 12 or 24 to power back to a higher

power consumption state." Additionally, column 1, lines 29-36, of Guterman teach "Generally, processor-based systems progressively power down. Some processor-based systems have several power consumption states. Based on a triggering of event such as lack activity, the system may power down to a lower power consumption state. After a period of continued inactivity, a system may power down to an even lower power consumption state." Columns 2-3 of Guterman also teaches that the communications subsystems and software application subsystems are interrelated (and may be included in the same or different integrated circuits) and are powered down "to coordinate power saving".

Therefore, as Guterman teaches "progressively powering down" software applications (which teaches and/or suggests progressively longer timeout periods (recited "second predetermined time period")), and as Dahlin also teaches using timeout periods to power down, it would have been obvious to one of ordinary skill in the art to "deactivate the applications" of Engstrom/Guterman "after a second predetermined period of time", in view of Dahlin/Guterman's teachings of progressively powering down to a plurality of lower power consumption states, as is conventional.

Regarding the feature of "at least one memory including computer program code for one or more programs, the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform at least the following...", the combination of Engstrom, Dahlin and Guterman, perform these recited features (see Fig. 4 of Engstrom which shows a processor and memory and see Fig. 1 of Guterman which also shows a processor and memory).

Regarding the newly recited feature in claim 33 (which was previously recited in claim 38), which recites "wherein the receiver comprises a filter configured to extract selected data from the received data for processing and for discarding of unwanted data", Engstrom teaches using filters, as recited (as described above in the rejection of claim 18, and see column 7, lines 50-67, which include "radio tuner programs"). Regarding the "discarding unwanted data", as "unwanted data signals" are also input to tuners 425 and 453 (via antenna 450), as these signals are not "tuned to" and further processed, they are "discarded", as recited.

Regarding claim 35, which recites "wherein, in said first resource saving mode, the received data is stored", see step 806 in Fig. 8.

Regarding claim 38, which now recites "wherein the receiver is configured to deactivate the filter after operating in said second resource saving mode for a third predetermined time period, although Engstrom teaches using filters (as described above in the rejection of claims 18 and 33, see column 7, lines 50-67, which include "radio tuner programs"), Engstrom does not explicitly teach this feature. As described above in the rejection of claim 33, Engstrom (as modified by Dahlin and Guterman) teaches progressively timing out communications and software applications (using increasing timeout periods) within a wireless device to proceed in a plurality of progressively lower powered modes. Therefore, it would have been obvious to one of ordinary skill in the art to power down (recited "remove") the filters of Engstrom after a "third predetermined time period" (which could be equal to or longer than the "second

predetermined time"), in view of Dahlin/Guterman's teachings of progressively increasing timeout periods used to power down software applications, as is conventional.

Regarding claim 39, which recites "wherein, after operating in said second resource saving mode for a fourth predetermined time period, an IP session arranged to handle the output data is closed", Engstrom teaches using IP protocols (see columns 3 and 5-6) for broadcast sessions and Dahlin also teaches using IP networks and protocols. It is noted that although Engstrom and Dahlin do not explicitly use the word "session", the applications and programs used for reception of broadcast data transmitted via IP protocols (in both Engstrom and Dahlin) will establish and maintain an IP session. As described above in the rejection of claim 38, Engstrom (as modified by Dahlin and Guterman) teaches progressively timing out (using increasing timeout periods) communications and software applications within a wireless device to proceed in a plurality of progressively lower powered modes. Therefore, it would have been obvious to one of ordinary skill in the art to power down or close an IP session established in Engstrom/Dahlin after a "fourth predetermined time period" (which could be equal to or longer than the "second predetermined time"), in view of Dahlin/Guterman's teachings of progressively increasing timeout periods used to power down software applications, as is conventional.

Regarding claim 42, which recites "wherein the interruption is an activation of an application unrelated to reception of data from the broadcast network", see step 802 in Fig. 8, where the incoming phone call is an "unrelated application", as recited.

Regarding claim 44, which recites “further comprising a telephone transceiver arranged to transmit and receive data via a telecommunications network”, mobile terminal 400 is a “telephone transceiver arranged to transmit and receive data via a telecommunications network”, as recited.

Regarding claim 45, which recites “comprising a media guide application to selectively access services provided over broadcast network”, see the description of Fig. 5 in column 8, which teaches that “Application 524 may store broadcast information, such as schedules, locally in data store 522”, where a “broadcast schedule” may be interpreted to be a “media guide” as recited.

Regarding claim 46, which recites “wherein the media guide application is configured to display and update a list of available services on a user interface of the receiving device”, it is conventional and inherent that broadcast “schedules” (recited media guide) are updated as recited and may be displayed on display 456.

Regarding claim 47, which recites “wherein the processed data is output to at least one of: a display for outputting visually displayable data; and audio output apparatus”, see the description of Fig. 4 in column 8, which includes audio interface 454, speaker and display 456, as recited.

Regarding claim 48, which recites “a communication system comprising: a broadcast network; and one or more receiving devices according to claim 33”, see Figs. 1-2, which show a broadcast network and one or more receiving devices as recited.

Regarding claim 49, which recites “a communication system according to claim 48, comprising: a bi-directional telecommunications network; wherein at least one of the

one or more receiving devices comprises a telephone transceiver arranged to transmit and receive data via said telecommunications network", see mobile devices 400, which are "arranged to transmit and receive data via said telecommunications network", as recited.

3. Claims 19, 21, 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom, Dahlin and Guterman, as applied to claims 18, 20 and 33 and 35 above, and further in view of U.S. Patent 7,031,746 to Na et al. (hereinafter "Na").

Regarding claims 19 and 34, which recite "wherein, when in said first resource saving mode, received data is discarded", Engstrom, Dahlin and Guterman do not explicitly teach this feature.

In an analogous art, Na teaches a device which allows multiple settings for processing data when an interruption occurs. Na teaches a number of methods (such as "TV off" mode or "audio off" mode) which allow reception of data with variations relating to whether or not to process (or discard) the received data. For example, in an "audio off mode", steps 221, 315, 431,519 and 627 (in Figs. 2-6 respectively) receive broadcast data but do not processed or output the audio data which is "discarding data". For example, if "TV off" mode has been selected, only the voice call is processed and "the controller 113 discontinues reception of the DMB signal," (which reads on the recited "received data is discarded"). Therefore, as Na teaches the conventionality of

selecting various data discarding modes, it would have been obvious to one of ordinary skill in the art to modify Engstrom/Dahlin/Guterman to discard unwanted data, if desired by a user.

Regarding claims 21 and 36, which recite "comprising, in the first resource saving mode, discarding data received following the expiry of a predetermined time limit", as described above in the rejection of claims 18 and 33, as described above, Na teaches a number of modes which allow received data to be discarded. As also described above, Dahlin and Guterman teach the conventionality of timing out receiver and application operations. Therefore, as both Engstrom and Na are both related to processing an interrupting phone call while simultaneously receiving a broadcast, it would have been obvious to one of ordinary skill in the art to modify Engstrom/Dahlin/Guterman to discard data (as taught by Na) after a "predetermined time period" (timeout periods as taught by Dahlin and Guterman), in order to conserve resources in a mobile device, as is conventional.

6. Claims 28 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom, Dahlin and Guterman as applied to claims 27 and 42 above, and further in view of Wakamatsu.

Regarding claims 28 and 43, which recite "which proceeds in said first resource saving mode in response to a determination that insufficient resources are available for

handling reception of data and the unrelated application", Engstrom and Dahlin do not explicitly teach this feature.

In an analogous art, Wakamatsu teaches a mobile phone which monitors battery voltage to determine what functions to enable on the mobile phone. As shown in Figs. 4-5, if insufficient battery resources are available, music capabilities may be stopped while a phone call is received by the mobile phone. Wakamatsu also teaches in section [0034] that the mobile phone may include "television functions" and "operation of these functions is similarly restricted". Therefore, as Wakamatsu teaches the conventionality of determining that insufficient resources are available (and switching modes of operation due to this determination), it would have been obvious to modify the combination of Engstrom/Dahlin/Guterman to "proceed in a first resource saving mode in response to a determination that insufficient resources are available" as recited, in order to handle a call on the mobile device without running out of battery power.

Response to Arguments

7. Applicant's arguments filed 10-12-10 have been fully considered but they are not persuasive. Regarding the Engstrom reference and the feature of "filtering data" Applicant provides the following arguments (on page 10 of the Remarks) "the Applicants submit that the tuners described in Engstrom do not filter received data, but rather provide a manner in which to select what data is received. For example, an FM tuner as

described as an example in Engstrom, *does not receive data across all frequencies of the FM tuner*, and then filter out the desired frequency from the received data, but rather can merely select a desired frequency by which to actually receive data." The Examiner respectfully disagrees with this point and asserts that the tuners of Engstrom do receive data of all frequencies. As antenna 450 does not (and can not) perform any tuning or filtering of received signals, *the signals of all the frequencies received by antenna 450 will be input into tuners 452 and 453*. Therefore, the "*received data*" signals input into tuners 452 and 453 *will include both wanted data and unwanted data*. The hardware and software applications included in the tuners (which "filter" by tuning to the user's desired program preferences) will "extract the selected data" from the received data (by "tuning to" and processing the users' preferences) and will also "discard" the unwanted data (by not "tuning to" and not processing the unwanted data), as recited. Therefore, as the tuners of Engstrom receive both wanted and unwanted data from the antenna, the hardware and software programs included in the tuners of Engstrom would "filter the received data in order to discard unwanted data", as recited. Accordingly, Applicant's arguments are not persuasive.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN KELLEY whose telephone number is (571) 272-5652. The examiner can normally be reached on Monday-Friday, 9AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SSK/

/LESTER KINCAID/

Supervisory Patent Examiner, Art Unit 2617